**Coverage for: RUBINA KHAN**

**Date: Thursday, February 23rd, 2017**

**Special Instructions:**

*\*I have some appointments this afternoon & will be back at school tomorrow.*

*\*My desk is in the Moderns Office (beside Room 228)*

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**Period 3 - 11:20-12:35: LUNCH**

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**Period 4 - 12:35-1:50: SNC2D8-24 (Grade 10 ESL Science) – Room 203**

*This class is in the middle of the Chemistry Unit & we have covered naming ionic and molecular compounds, and are currently learning about balancing chemical equations. They need a lot of assistance, mostly because of language.*

1. Please take up the homework that was due for today: p.165 #1,2 & p.168 #7 (Answers attached)

-Please write the answers on the chalkboard.

2. Students should work quietly on the following. Please help them as needed & take up the answers before

the end of class (Answers attached):

-p.168 #8

-p.174 #12

Homework: p.175 #13 & review for quiz tomorrow (naming ionic & molecular compounds).

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**Period 5 - 1:55-3:10: ON CALL/PREP**

*\*Please check with the Main Office for any on-call duties.\**

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Thank you!

Homework solutions:

p.165 #1, 2

*1. Write a word equation, a skeleton equation, and a balanced chemical equation for each chemical reaction. Include the indications of state for all reactants & products in the balanced equation.*

*a. A solid piece of magnesium reacts with oxygen gas to produce solid magnesium oxide.*

|  |  |  |
| --- | --- | --- |
| word equation: | skeleton equation: | balanced chemical equation: |
| **magnesium + oxygen gas 🡪 magnesium oxide** | **Mg(s) + O2(g) 🡪 MgO(s)** | **2Mg(s) + O2(g) 🡪2MgO(s)** |

*b. Iron reacts with oxygen to produce rust, Fe2O3.*

|  |  |  |
| --- | --- | --- |
| word equation: | skeleton equation: | balanced chemical equation: |
| **iron + oxygen 🡪 iron (III) oxide** | **Fe(s) + O2(g) 🡪 Fe2O3(s)** | **4Fe(s) + 3O2(g) 🡪 2Fe2O3(s)** |

*c. Nitrogen gas reacts with bromine gas to form gaseous nitrogen tribromide.*

|  |  |  |
| --- | --- | --- |
| word equation: | skeleton equation: | balanced chemical equation: |
| **nitrogen gas + bromine gas 🡪 nitrogen tribromide** | **N2(g) + Br2(g) 🡪 NBr3(g)** | **N2(g) + 3Br2(g) 🡪 2NBr3(g)** |

*2. The combustion of methane gas, CH4(g), involves its reaction with oxygen to produce carbon dioxide gas and water vapour. Write the balanced chemical equation for this reaction.*

**CH4(g) + 2O2(g) 🡪 CO2(g) + 2H2O(g)**

p.168 #7

*7. State whether each chemical equation is balanced. If an equation is not balanced, identify the elements that are not balanced and then balance them.*

*a. Al(s) + 3F2(g) 🡪 2AlF3(s)*

**-The aluminum is not balanced.**

**-balanced chemical equation: 2Al(s) + 3F2(g) 🡪 2AlF3(s)**

*b. Ca(OH)2(aq) + 2HCl(aq) 🡪 CaCl2(aq) + H2O(l)*

**-The hydrogen and oxygen are not balanced.**

**-balanced chemical equation: Ca(OH)2(aq) + 2HCl(aq) 🡪 CaCl2(aq) + 2H2O(l)**

*c. 2C2H6(g) + 7O2(g) 🡪 4CO2(g) + 6H2O(g)*

**-This equation is balanced.**

*d. K2SO4(aq) + 2AgNO3(aq) 🡪 Ag2SO3(s) + KNO3(aq)*

**-The potassium and nitrate are not balanced.**

**-balanced chemical equation: K2SO4(aq) + 2AgNO3(aq) 🡪 Ag2SO3(s) + 2KNO3(aq)**

Classwork solutions:

p.168 #8

*8. When solid sodium carbonate is heated, it changes into solid sodium oxide and carbon dioxide gas. Write the word equation, the skeleton equation, and the balanced chemical equation for this reaction.*

|  |  |  |
| --- | --- | --- |
| word equation: | skeleton equation: | balanced chemical equation: |
| **sodium carbonate 🡪 sodium oxide + carbon dioxide** | **Na2CO3(s) 🡪 Na2O(s) + CO2(g)** | **Na2CO3(s) 🡪 Na2O(s) + CO2(g)**  **(It was already balanced!)** |

p.174 #12

*12. Copy and balance each chemical equation.*

*a. Mg3N2(s) 🡪* ***3****Mg(s) + N2(g)*

*b.* ***4****Mn(s) +* ***3****O2(g) 🡪* ***2****Mn2O3(s)*

*c. CO2(g) +* ***4****H2(g) 🡪 CH4(g) +* ***2****H2O(g)*

*d.* ***2****PbO(s) 🡪* ***2****Pb(s) + O2(g)*

*e.* ***2****C2H6(g) +* ***7****O2(g) 🡪* ***4****CO2(g) +* ***6****H2O(g)*

*f. Cu(s) +* ***2****AgNO3(aq) 🡪* ***2****Ag(s) + Cu(NO3)2(aq)*

*g. C3H8(g) +* ***5****O2(g) 🡪* ***3****CO2(g) +* ***4****H2O(g)*

*h.* ***3****PbCl4(aq) +* ***4****K3PO4(aq) 🡪* ***12****KCl(aq) + Pb3(PO4)4(s)*